

Bedrock Topography of Boone County, Indiana

Metadata:	Page
♦ <u>Identification Information</u>	1
♦ <u>Data Quality Information</u>	2
♦ <u>Spatial Data Organization Information</u>	15
♦ <u>Spatial Reference Information</u>	15
♦ <u>Entity and Attribute Information</u>	15
♦ <u>Distribution Information</u>	16
♦ <u>Metadata Reference Information</u>	17

IDENTIFICATION_INFORMATION

Citation:

Citation_Information:

Originator:

Glenn Grove, IDNR Division of Water, Ground Water Section

Publication_Date: 200207

Title: Bedrock Topography of Boone County, Indiana (Indiana Department of Natural Resources, Division of Water, 1:48,000, Line Coverage)

Edition: 1.0

Geospatial_Data_Presentation_Form: Map

Publication_Information:

Publication_Place: Indianapolis, Indiana, USA

Publisher: Indiana Department of Natural Resources, Division of Water

Other_Citation_Details: This map was compiled from multiple unpublished work maps at 1:24,000 scale: see Data Quality Information section for details about the individual maps that were merged to make the composite map.

Online_Linkage:

Larger_Work_Citation:

Citation_Information:

Originator:

Publication_Date:

Title:

Publication_Information:

Publication_Place:

Publisher:

Online_Linkage:

Description:

Abstract: This file is a digital geospatial line coverage of bedrock-surface topography for Boone County, Indiana. The mapping was conducted using the water well record data as well as previously published reports and maps of the region. Primary attribute is the elevation of the bedrock surface.

Purpose: Display and/or analyses requiring bedrock topography contours for Boone County, Indiana. The coverage is suitable for use in a Geographic Information System.

Supplemental_Information:

Time_Period_of_Content:

Time_Period_Information:

Range_of_Dates/Times:

Beginning_Date: 1959

Ending_Date: 2002

Currentness_Reference: publication date

Status:

Progress: Complete

Maintenance_and_Update_Frequency: None planned

Spatial_Domain:

Bounding_Coordinates: Bounding_Coordinates:

West_Bounding_Coordinate: 521268
East_Bounding_Coordinate: 574818
North_Bounding_Coordinate: 4455631
South_Bounding_Coordinate: 4413728

Keywords:

Theme:

Theme_Keyword_Thesaurus: None
Theme_Keyword: geology
Theme_Keyword: bedrock-surface
Theme_Keyword: elevation

Place:

Place_Keyword_Thesaurus: None
Place_Keyword: Boone County, Indiana, USA

Access_Constraints: This file is available to anyone, but access may be contingent on written request, specific terms relevant to the agency or person making the request, and/or current freedom of information statutes in the State of Indiana.

Use_Constraints: Acknowledgement of the following agency in products derived from these data: Indiana Department of Natural Resources, Division of Water. This map was compiled by staff of the Indiana Department of Natural Resources, Division of Water over many years using data believed to be reasonably accurate. However, a degree of error is inherent in all maps. This product is distributed "as-is" without warranties of any kind, either expressed or implied. The maps are intended for use only at the published scale.

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Division of Water
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The information on these media is proprietary to the State of Indiana, Indiana Department of Natural Resources, Division of Water. Any copying, adaptation, or distribution of these data without the express written consent of IDNR-DOW is discouraged.

Point_of_Contact:

Contact_Information:

Contact_Organization_Primary:

Contact_Organization: Indiana Department of Natural Resources, Division of Water

Contact_Person: Glenn Grove

Contact_Position: Engineering Geologist

Contact_Address:

Address_Type: Mailing and physical address

Address: 402 W. Washington Street W264

City: Indianapolis

State_or_Province: Indiana

Postal_Code: 46204

Country: USA

Contact_Voice_Telephone: 317-232-4160

Contact_Facsimile_Telephone: 317-233-4579

Contact_Electronic_Mail_Address: ggrove@dnr.state.in.us

Native_Data_Set_Environment:

ArcGIS version 8.2 line coverage format

Approximate size 0.7 MB

Boone_cont7

DATA_QUALITY_INFORMATION

Attribute_Accuracy:

Attribute_Accuracy_Report: The mapping was conducted by hand on mylars over base maps of 1:24,000 quadrangles.

Logical_Consistency_Report:

Completeness_Report: Every attempt was made to include data from water well records that had complete information, including complete location, construction, pump test, and lithological information. There were a few areas in the county that had insufficient information due to the particular drillers in the area who chronically under-report information on water well records or because of the pervasive insufficient supply of water. Most water well records for poorly producing wells are missing information.

Positional_Accuracy: The locations of the contours are most often based on a combination of the water well record data and base map surface contours. The locations of actual wells were usually estimated from 7.5 minute topographic maps, and visual siting of wells was not always possible. Many locations were based on location of the street address on the water well record.

Horizontal_Positional_Accuracy:

Horizontal_Positional_Accuracy_Report: Locations of contour lines that are dependent on located well records might be offset slightly if the well is mislocated. Georeferencing of the maps was conducted after the maps were vectorized from a scanned raster image. A minimum of four reference tic marks were used to register the image, and UTM coordinates were assigned to each tic mark before the coverage was transformed to the map projection. The maps were retraced onto mylar for stability, but any positional changes from the paper maps were retained. There is also some inherent errors in transferring tic marks from paper to mylar to digital form, so additional error is expected in this step.

Vertical_Positional_Accuracy:

Vertical_Positional_Accuracy_Report: The elevation of each contour is dependent on the field-located surface elevation of the water well records. If the well is mislocated, the surface elevation is wrong, or the driller's estimation of depth-to-bedrock is incorrect, then the resulting bedrock elevation will be incorrect, as well. Horizontal positional errors will result in vertical positional errors in an elevation contour map such as this one.

Lineage:

Source_Information:

Source_Citation:

Citation_Information:

Originator: Indiana Department of Natural Resources, Division of Water

Publication_Date: 200207

Title: Bedrock Topography of Boone County, Indiana (Indiana Department of Natural Resources, Division of Water, 1:48,000, Line Coverage)

Edition: 1.0

Geospatial_Data_Presentation_Form: map

Publication_Information:

Publication_Place: Indianapolis, IN

Publisher: State of Indiana, IDNR

Other_Citation_Details:

Online_Linkage:

Larger_Work_Citation:

Citation_Information:

Originator:

Publication_Date:

Title:

Publication_Information:

Publication_Place

Publisher:

Online_Linkage:

Source_Scale_Denominator: 48,000

Type_of_Source_Media: digital file

Source_Time_Period_of_Content:

Time_Period_Information:

Range_of_Dates/Times:

Beginning_Date: 1959

Ending_Date: 2002
Source_Currentness_Reference: Publication date
Source_Citation_Abbreviation: IDNR_DOW_Boone_Co_Bedrock_Topography
Source_Contribution: water well records from the IDNR-DOW water well record archives, seismic data, oil and gas logs, publications
Process_Step:

Process_Description: Staff of the IDNR-DOW conducted mapping for this project from 1997 through 2002. The mapping was typically at a 7.5 minute quadrangle scale of 1:24,000. Data were selected by careful evaluation of water well records to determine if the water well records were located and if they contained complete and reasonable information. In other areas, where appropriate, additional data such as seismic shots or oil and gas logs were used. The mapping was conducted on a mylar sheet (on file at the IDNR-DOW).

Source_Used_Citation_Abbreviation: IDNR-DOW water well records for domestic wells submitted by water-well drillers from 1956-2002

Process_Date: 2002
Source_Produced_Citation_Abbreviation:
Process_Contact:
Contact_Information:
Contact_Person_Primary:
Contact_Organization: Indiana Department of Natural Resources, Division of Water
Contact_Person: Glenn Grove
Contact_Position: Engineering Geologist
Contact_Address:
Address_Type: Mailing and physical address
Address: 402 W. Washington Street W264
City: Indianapolis
State_or_Province: Indiana
Postal_Code: 46204
Country: USA
Contact_Voice_Telephone: 317-232-4160
Contact_Facsimile_Telephone: 317-233-4579
Contact_Electronic_Mail_Address: ggrove@dnr.state.in.us
Hours_of_Service: 8:15am - 4:15pm

Process_Step:

Process_Description: The mylar was scanned using a wide-bed black-and-white scanner and saved as a raster image. The raster image was vectorized using a tracer program (ArcScan). The vector data were georeferenced to UTM Zone 16, NAD27. The arc coverage was attributed with the appropriate elevation value. (Personnel: Glenn Grove)

Source_Used_Citation_Abbreviation: IDNR-DOW water well records for domestic wells submitted by water-well drillers from 1956-2002

Process_Date: 2002
Source_Produced_Citation_Abbreviation:
Process_Contact:
Contact_Information:
Contact_Person_Primary:
Contact_Organization: Indiana Department of Natural Resources, Division of Water
Contact_Person: Glenn Grove
Contact_Position: Engineering Geologist
Contact_Address:
Address_Type: Mailing and physical address
Address: 402 W. Washington Street W264
City: Indianapolis
State_or_Province: Indiana
Postal_Code: 46204
Country: USA
Contact_Voice_Telephone: 317-232-4160
Contact_Facsimile_Telephone: 317-233-4579

Contact_Electronic_Mail_Address: ggrove@dnr.state.in.us

Hours_of_Service: 8:15am - 4:15pm

Process_Step:

Process_Description: After the maps were attributed and georeferenced, each map was digitally edgematched and joined together using ESRI ArcInfo.

Source_Used_Citation_Abbreviation

Process_Date: 2002

Source_Produced_Citation_Abbreviation:

Process_Contact:

Contact_Information:

Contact_Person_Primary:

Contact_Organization: Indiana Department of Natural Resources, Division of Water

Contact_Person: Glenn Grove

Contact_Position: Engineering Geologist

Contact_Address:

Address_Type: Mailing and physical address

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State_or_Province: Indiana

Postal_Code: 46204

Country: USA

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Contact_Facsimile_Telephone: 317-233-4579

Contact_Electronic_Mail_Address: ggrove@dnr.state.in.us

Hours_of_Service: 8:15am - 4:15pm

Process_Step:

Process_Description: The above process steps apply for all work maps.

Source_Used_Citation_Abbreviation

Process_Date: 2002

Source_Produced_Citation_Abbreviation:

Process_Contact:

Contact_Information:

Contact_Person_Primary:

Contact_Organization: Indiana Department of Natural Resources, Division of Water

Contact_Person: Glenn Grove

Contact_Position: Engineering Geologist

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Postal_Code: 46204

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Contact_Voice_Telephone: 317-232-4160

Contact_Facsimile_Telephone: 317-233-4579

Contact_Electronic_Mail_Address: ggrove@dnr.state.in.us

Hours_of_Service: 8:15am - 4:15pm

Lineage:

Source_Information:

Source_Citation:

Citation_Information:

Originator: Marv Thompson, Indiana Department of Natural Resources, Division of Water

Publication_Date: work completed 1999

Title: Unpublished work map, Carmel Quadrangle Bedrock Topography. 1:24,000

Edition: 1.0

Geospatial_Data_Presentation_Form: map
Publication_Information:
Publication_Place: Indianapolis, IN
Publisher: State of Indiana, IDNR
Other_Citation_Details: Data plotted by Marv Thompson: 1999
Online_Linkage:
Larger_Work_Citation:
Citation_Information:
Originator:
Publication_Date:
Title:
Publication_Information:
Publication_Place:
Publisher:
Online_Linkage:
Source_Scale_Denominator: 24000
Type_of_Source_Media: mylar
Source_Time_Period_of_Content:
Time_Period_Information:
Range_of_Dates/Times:
Beginning_Date: 1959
Ending_Date: 1999
Source_Currentness_Reference: Publication date
Source_Citation_Abbreviation: IDNR_DOW_Bedrock_Topography_Carmel_Quadrangle_Indiana
Source_Contribution: water well records from the IDNR-DOW water well record archives, seismic data, oil and gas logs, publications

Lineage:

Source_Information:
Source_Citation:
Citation_Information:
Originator: William C. Herring and Glenn E. Grove, Indiana Department of Natural Resources, Division of

Water

Publication_Date: work completed 2002
Title: Unpublished work map, Colfax Quadrangle Bedrock Topography. 1:24,000
Edition: 1.0
Geospatial_Data_Presentation_Form: map
Publication_Information:
Publication_Place: Indianapolis, IN
Publisher: State of Indiana, IDNR
Other_Citation_Details: Data plotted by William C. Herring and Glenn E. Grove: 2002; the map was retraced by William C. Herring and Glenn E. Grove for scanning.
Online_Linkage:
Larger_Work_Citation:
Citation_Information:
Originator:
Publication_Date:
Title:
Publication_Information:
Publication_Place:
Publisher:
Online_Linkage:
Source_Scale_Denominator: 24000
Type_of_Source_Media: mylar
Source_Time_Period_of_Content:
Time_Period_Information:

Range_of_Dates/Times:
Beginning_Date: 1959
Ending_Date: 2002
Source_Currentness_Reference: Publication date
Source_Citation_Abbreviation: IDNR_DOW_Bedrock_Topography_Colfax_Quadrangle_Indiana
Source_Contribution: water well records from the IDNR-DOW water well record archives, seismic data, oil and gas logs, publications.

Lineage:

Source_Information:
Source_Citation:
Citation_Information:
Originator: Marv Thompson, Indiana Department of Natural Resources, Division of Water
Publication_Date: work completed 1998
Title: Unpublished work map, Fayette Quadrangle Bedrock Topography. 1:24,000
Edition: 1.0
Geospatial_Data_Presentation_Form: map
Publication_Information:
Publication_Place: Indianapolis, IN
Publisher: State of Indiana, IDNR
Other_Citation_Details: Data plotted by Marv Thompson: 1999; Marv Thompson retraced the map for scanning.
Online_Linkage:
Larger_Work_Citation:
Citation_Information:
Originator:
Publication_Date:
Title:
Publication_Information:
Publication_Place:
Publisher:
Online_Linkage:
Source_Scale_Denominator: 24000
Type_of_Source_Media: mylar
Source_Time_Period_of_Content:
Time_Period_Information:
Range_of_Dates/Times:
Beginning_Date: 1959
Ending_Date: 1999
Source_Currentness_Reference: Publication date
Source_Citation_Abbreviation: IDNR_DOW_Bedrock_Topography_Fayette_Quadrangle_Indiana
Source_Contribution: water well records from the IDNR-DOW water well record archives, seismic data, oil and gas logs, publications

Lineage:

Source_Information:
Source_Citation:
Citation_Information:
Originator: William C. Herring (2002) and Marvin B. Thompson (1999), Indiana Department of Natural Resources, Division of Water
Publication_Date: work completed 2002
Title: Unpublished work map, Hazelrigg Quadrangle Bedrock Topography. 1:24,000
Edition: 1.0
Geospatial_Data_Presentation_Form: map
Publication_Information:
Publication_Place: Indianapolis, IN

Publisher: State of Indiana, IDNR
 Other_Citation_Details: Data plotted by Marv Thompson: 1999 and William C. Herring 2002
 Online_Linkage:
 Larger_Work_Citation:
 Citation_Information:
 Originator:
 Publication_Date:
 Title:
 Publication_Information:
 Publication_Place:
 Publisher:
 Online_Linkage:
 Source_Scale_Denominator: 24000
 Type_of_Source_Media: mylar
 Source_Time_Period_of_Content:
 Time_Period_Information:
 Range_of_Dates/Times:
 Beginning_Date: 1959
 Ending_Date: 2002
 Source_Currentness_Reference: Publication date
 Source_Citation_Abbreviation: IDNR_DOW_Bedrock_Topography_Hazelrigg_Quadrangle_Indiana
 Source_Contribution: water well records from the IDNR-DOW water well record archives, seismic data, oil and gas logs, publications

Lineage:

Source_Information:
 Source_Citation:
 Citation_Information:
 Originator: Glenn E. Grove (2002) and Marvin B. Thompson (1999), Indiana Department of Natural Resources, Division of Water
 Publication_Date: work completed 2002
 Title: Unpublished work map, Kirklin Quadrangle Bedrock Topography. 1:24,000
 Edition: 1.0
 Geospatial_Data_Presentation_Form: map
 Publication_Information:
 Publication_Place: Indianapolis, IN
 Publisher: State of Indiana, IDNR
 Other_Citation_Details: Data plotted by Glenn E. Grove (2002) and Marvin B. Thompson (1999); Glenn E. Grove (2002) and Marvin B. Thompson (1999) retraced the map for scanning.
 Online_Linkage:
 Larger_Work_Citation:
 Citation_Information:
 Originator:
 Publication_Date:
 Title:
 Publication_Information:
 Publication_Place:
 Publisher:
 Online_Linkage:
 Source_Scale_Denominator: 24000
 Type_of_Source_Media: mylar
 Source_Time_Period_of_Content:
 Time_Period_Information:
 Range_of_Dates/Times:
 Beginning_Date: 1959
 Ending_Date: 2002

Source_Currentness_Reference: Publication date
Source_Citation_Abbreviation: IDNR_DOW_Bedrock_Topography_Kirklin_Quadrangle_Indiana
Source_Contribution: water well records from the IDNR-DOW water well record archives, seismic data, oil and gas logs, publications

Lineage:

Source_Information:
Source_Citation:
Citation_Information:
Originator: Glenn E. Grove (2002), William C. Herring (2002), and Marvin B. Thompson (1999), Indiana Department of Natural Resources, Division of Water
Publication_Date: work completed 2002
Title: Unpublished work map, Lebanon Quadrangle Bedrock Topography. 1:24,000
Edition: 1.0
Geospatial_Data_Presentation_Form: map
Publication_Information:
Publication_Place: Indianapolis, IN
Publisher: State of Indiana, IDNR
Other_Citation_Details: Data plotted by Glenn E. Grove (2002), William C. Herring (2002), and Marvin B. Thompson (1999); Glenn E. Grove (2002), William C. Herring (2002), and Marvin B. Thompson (1999) retraced the map for scanning.
Online_Linkage:
Larger_Work_Citation:
Citation_Information:
Originator:
Publication_Date:
Title:
Publication_Information:
Publication_Place:
Publisher:
Online_Linkage:
Source_Scale_Denominator: 24000
Type_of_Source_Media: mylar
Source_Time_Period_of_Content:
Time_Period_Information:
Range_of_Dates/Times:
Beginning_Date: 1959
Ending_Date: 2002
Source_Currentness_Reference: Publication date
Source_Citation_Abbreviation: IDNR_DOW_Bedrock_Topography_Lebanon_Quadrangle_Indiana
Source_Contribution: water well records from the IDNR-DOW water well record archives, seismic data, oil and gas logs, publications

Lineage:

Source_Information:
Source_Citation:
Citation_Information:
Originator: Marv Thompson, Indiana Department of Natural Resources, Division of Water
Publication_Date: work completed 1998
Title: Unpublished work map, Lizton Quadrangle Bedrock Topography. 1:24,000
Edition: 1.0
Geospatial_Data_Presentation_Form: map
Publication_Information:
Publication_Place: Indianapolis, IN
Publisher: State of Indiana, IDNR

Other_Citation_Details: Data plotted by Marv Thompson: 1999; Marv Thompson retraced the map for scanning.
 Online_Linkage:
 Larger_Work_Citation:
 Citation_Information:
 Originator:
 Publication_Date:
 Title:
 Publication_Information:
 Publication_Place:
 Publisher:
 Online_Linkage:
 Source_Scale_Denominator: 24000
 Type_of_Source_Media: mylar
 Source_Time_Period_of_Content:
 Time_Period_Information:
 Range_of_Dates/Times:
 Beginning_Date: 1959
 Ending_Date: 1999
 Source_Currentness_Reference: Publication date
 Source_Citation_Abbreviation: IDNR_DOW_Bedrock_Topography_Lizton_Quadrangle_Indiana
 Source_Contribution: water well records from the IDNR-DOW water well record archives, seismic data, oil and gas logs, publications

Lineage:

Source_Information:
 Source_Citation:
 Citation_Information:
 Originator: Glenn E. Grove, Indiana Department of Natural Resources, Division of Water
 Publication_Date: work completed 2002
 Title: Unpublished work map, Mechanicsburg Quadrangle Bedrock Topography. 1:24,000
 Edition: 1.0
 Geospatial_Data_Presentation_Form: map
 Publication_Information:
 Publication_Place: Indianapolis, IN
 Publisher: State of Indiana, IDNR
 Other_Citation_Details: Data plotted by Glenn E. Grove: 2002; Glenn E. Grove retraced the map for scanning.
 Online_Linkage:
 Larger_Work_Citation:
 Citation_Information:
 Originator:
 Publication_Date:
 Title:
 Publication_Information:
 Publication_Place:
 Publisher:
 Online_Linkage:
 Source_Scale_Denominator: 24000
 Type_of_Source_Media: mylar
 Source_Time_Period_of_Content:
 Time_Period_Information:
 Range_of_Dates/Times:
 Beginning_Date: 1959
 Ending_Date: 2002
 Source_Currentness_Reference: Publication date

Source_Citation_Abbreviation: IDNR_DOW_Bedrock_Topography_Mechanicsburg_Quadrangle_Indiana
Source_Contribution: water well records from the IDNR-DOW water well record archives, seismic data, oil and gas logs, publications

Lineage:

Source_Information:
Source_Citation:
Citation_Information:
Originator: William C. Herring (2002) and Marvin B. Thompson (1999), Indiana Department of Natural Resources, Division of Water
Publication_Date: work completed 2002
Title: Unpublished work map, New Ross Quadrangle Bedrock Topography. 1:24,000
Edition: 1.0
Geospatial_Data_Presentation_Form: map
Publication_Information:
Publication_Place: Indianapolis, IN
Publisher: State of Indiana, IDNR
Other_Citation_Details: Data plotted by Marv Thompson: 1999 and William C. Herring 2002
Online_Linkage:
Larger_Work_Citation:
Citation_Information:
Originator:
Publication_Date:
Title:
Publication_Information:
Publication_Place:
Publisher:
Online_Linkage:
Source_Scale_Denominator: 24000
Type_of_Source_Media: mylar
Source_Time_Period_of_Content:
Time_Period_Information:
Range_of_Dates/Times:
Beginning_Date: 1959
Ending_Date: 2002
Source_Currentness_Reference: Publication date
Source_Citation_Abbreviation: IDNR_DOW_Bedrock_Topography_New_Ross_Quadrangle_Indiana
Source_Contribution: water well records from the IDNR-DOW water well record archives, seismic data, oil and gas logs, publications

Lineage:

Source_Information:
Source_Citation:
Citation_Information:
Originator: Marv Thompson, Indiana Department of Natural Resources, Division of Water
Publication_Date: work completed 1998
Title: Unpublished work map, Rosston Quadrangle Bedrock Topography. 1:24,000
Edition: 1.0
Geospatial_Data_Presentation_Form: map
Publication_Information:
Publication_Place: Indianapolis, IN
Publisher: State of Indiana, IDNR
Other_Citation_Details: Data plotted by Marv Thompson: 1999; Marv Thompson retraced the map for scanning.
Online_Linkage:
Larger_Work_Citation:

Citation_Information:
Originator:
Publication_Date:
Title:
Publication_Information:
Publication_Place:
Publisher:
Online_Linkage:
Source_Scale_Denominator: 24000
Type_of_Source_Media: mylar
Source_Time_Period_of_Content:
Time_Period_Information:
Range_of_Dates/Times:
Beginning_Date: 1959
Ending_Date: 1999
Source_Currentness_Reference: Publication date
Source_Citation_Abbreviation: IDNR_DOW_Bedrock_Topography_Rosston_Quadrangle_Indiana
Source_Contribution: water well records from the IDNR-DOW water well record archives, seismic data, oil and gas logs, publications

Lineage:

Source_Information:
Source_Citation:
Citation_Information:
Originator: William C. Herring, Indiana Department of Natural Resources, Division of Water
Publication_Date: work completed 200207
Title: Unpublished work map, Shannondale Quadrangle Bedrock Topography. 1:24,000
Edition: 1.0
Geospatial_Data_Presentation_Form: map
Publication_Information:
Publication_Place: Indianapolis, IN
Publisher: State of Indiana, IDNR
Other_Citation_Details: Data plotted by William C. Herring: 2002
Online_Linkage:
Larger_Work_Citation:
Citation_Information:
Originator:
Publication_Date:
Title:
Publication_Information:
Publication_Place:
Publisher:
Online_Linkage:
Source_Scale_Denominator: 24000
Type_of_Source_Media: mylar
Source_Time_Period_of_Content:
Time_Period_Information:
Range_of_Dates/Times:
Beginning_Date: 1959
Ending_Date: 2002
Source_Currentness_Reference: Publication date
Source_Citation_Abbreviation: IDNR_DOW_Bedrock_Topography_Shannondale_Quadrangle_Indiana
Source_Contribution: water well records from the IDNR-DOW water well record archives, seismic data, oil and gas logs, publications

Lineage:

Source_Information:

Source_Citation:

Citation_Information:

Originator: Hamilton and Tipton Counties by Tim Kroeker, Indiana Department of Natural Resources,
Division of Water

Publication_Date: work completed 1997

Title: Unpublished work map, Sheridan Quadrangle Bedrock Topography. 1:48,000

Edition: 1.0

Geospatial_Data_Presentation_Form: map

Publication_Information:

Publication_Place: Indianapolis, IN

Publisher: State of Indiana, IDNR

Other_Citation_Details: Data plotted by Tim Kroeker: 1997; Tim Kroeker retraced the map for scanning.

Online_Linkage:

Larger_Work_Citation:

Citation_Information:

Originator:

Publication_Date:

Title:

Publication_Information:

Publication_Place:

Publisher:

Online_Linkage:

Source_Scale_Denominator: 48000

Type_of_Source_Media: mylar

Source_Time_Period_of_Content:

Time_Period_Information:

Range_of_Dates/Times:

Beginning_Date: 1959

Ending_Date: 1997

Source_Currentness_Reference: Publication date

Source_Citation_Abbreviation: IDNR_DOW_Bedrock_Topography_Sheridan_Quadrangle_Indiana

Source_Contribution: water well records from the IDNR-DOW water well record archives, seismic data, oil and
gas logs, publications

Lineage:

Source_Information:

Source_Citation:

Citation_Information:

Originator: Glenn E. Grove and William C. Herring, Indiana Department of Natural Resources, Division of
Water

Publication_Date: work completed 200207

Title: Unpublished work map, Thorntown Quadrangle Bedrock Topography. 1:24,000

Edition: 1.0

Geospatial_Data_Presentation_Form: map

Publication_Information:

Publication_Place: Indianapolis, IN

Publisher: State of Indiana, IDNR

Other_Citation_Details: Data plotted by Glenn E. Grove and William C. Herring: 2002

Online_Linkage:

Larger_Work_Citation:

Citation_Information:

Originator:

Publication_Date:

Title:

Publication_Information:

Publication_Place:
Publisher:
Online_Linkage:
Source_Scale_Denominator: 24000
Type_of_Source_Media: mylar
Source_Time_Period_of_Content:
Time_Period_Information:
Range_of_Dates/Times:
Beginning_Date: 1959
Ending_Date: 2002
Source_Currentness_Reference: Publication date
Source_Citation_Abbreviation: IDNR_DOW_Bedrock_Topography_Thorntown_Quadrangle_Indiana
Source_Contribution: water well records from the IDNR-DOW water well record archives, seismic data, oil and gas logs, publications

Lineage:

Source_Information:
Source_Citation:
Citation_Information:
Originator: Tim Kroeker, Indiana Department of Natural Resources, Division of Water
Publication_Date: work completed 1997
Title: Unpublished work map, Westfield Quadrangle Bedrock Topography. 1:48,000
Edition: 1.0
Geospatial_Data_Presentation_Form: map
Publication_Information:
Publication_Place: Indianapolis, IN
Publisher: State of Indiana, IDNR
Other_Citation_Details: Data plotted by Tim Kroeker: 1997; Tim Kroeker traced the map for scanning.
Online_Linkage:
Larger_Work_Citation:
Citation_Information:
Originator:
Publication_Date:
Title:
Publication_Information:
Publication_Place:
Publisher:
Online_Linkage:
Source_Scale_Denominator: 48000
Type_of_Source_Media: mylar
Source_Time_Period_of_Content:
Time_Period_Information:
Range_of_Dates/Times:
Beginning_Date: 1959
Ending_Date: 1997
Source_Currentness_Reference: Publication date
Source_Citation_Abbreviation: IDNR_DOW_Bedrock_Topography_Westfield_Quadrangle_Indiana
Source_Contribution: water well records from the IDNR-DOW water well record archives, seismic data, oil and gas logs, publications

Lineage:

Source_Information:
Source_Citation:
Citation_Information:
Originator: Marv Thompson, Indiana Department of Natural Resources, Division of Water
Publication_Date: work completed 1999

Title: Unpublished work map, Zionsville Quadrangle Bedrock Topography. 1:24,000
Edition: 1.0
Geospatial_Data_Presentation_Form: map
Publication_Information:
 Publication_Place: Indianapolis, IN
 Publisher: State of Indiana, IDNR
 Other_Citation_Details: Data plotted by Marv Thompson: 1999
 Online_Linkage:
Larger_Work_Citation:
 Citation_Information:
 Originator:
 Publication_Date:
 Title:
 Publication_Information:
 Publication_Place:
 Publisher:
 Online_Linkage:
Source_Scale_Denominator: 24000
Type_of_Source_Media: mylar
Source_Time_Period_of_Content:
 Time_Period_Information:
 Range_of_Dates/Times:
 Beginning_Date: 1959
 Ending_Date: 1999
 Source_Currentness_Reference: Publication date
Source_Citation_Abbreviation: IDNR DOW Bedrock Topography Zionsville Quadrangle Indiana
Source_Contribution: water well records from the IDNR-DOW water well record archives, seismic data, oil and gas logs, publications

SPATIAL_DATA_ORGANIZATION_INFORMATION

Direct_Spatial_Reference_Method: Vector
Point_and_Vector_Object_Information:
 SDTS_Terms_Description:
 SDTS_Point_and_Vector_Object_Type: GT-polygon composed of chains
 Point_and_Vector_Object_Count: 1

SPATIAL_REFERENCE_INFORMATION

Horizontal_Coordinate_System_Definition:
 Planar:
 Grid_Coordinate_System:
 Grid_Coordinate_System_Name: Universal Transverse Mercator
 Universal_Transverse_Mercator:
 UTM_Zone_Number: 16
 Transverse_Mercator:
 Scale_Factor_at_Central_Meridian: 0.999600
 Longitude_of_Central_Meridian: -87.000000
 Latitude_of_Projection_Origin: 0.000000
 False_Easting: 500000.000000

False_Northing: 0.000000
Planar_Coordinate_Information:
Planar_Coordinate_Encoding_Method: Coordinate pair
Coordinate_Representation:
Abscissa_Resolution:
Ordinate_Resolution:
Planar_Distance_Units: Meters
Geodetic_Model:
Horizontal_Datum_Name: North American Datum of 1927
Ellipsoid_Name: Clarke 1866
Semi-major_Axis: 6378206.4000000
Denominator_of_Flattening_Ratio: 294.98

ENTITY_AND_ATTRIBUTE_INFORMATION

Overview_Description:

Entity_and_Attribute_Overview: The points in this file represent calculations of bedrock-surface topography determined at or around water wells. The file was created for the purpose of characterizing the bedrock surface as a tool to help assess the ground water resources of Boone County, Indiana .

Entity_and_Attribute_Detail_Citation:

Detailed_Description:

Entity_Type:

Entity_Type_Label: Boone_bedrock.aat
Entity_Type_Definition: arc attribute table
Entity_Type_Definition_Source: None

Attribute:

Attribute_Label: elevation
Attribute_Definition: the elevation of the bedrock surface in feet above mean sea level
Attribute_Definition_Source: IDNR-DOW, Ground Water Section
Attribute_Domain_Values:
Range_Domain:
Range_Domain_Minimum: 550
Range_Domain_Maximum: 900
Attribute_Units_of_Measure: integer
Attribute_Measurement_Resolution: 25 foot contours.
Attribute_Value_Accuracy_Information:
Attribute_Value_Accuracy:
Attribute_Value_Accuracy_Explanation:

Attribute:

Attribute_Label: Mod
Attribute_Definition: Modulo of elevation value. Used to assign color or patterns to contour classes
(lines).

Attribute_Definition_Source: IDNR-DOW Ground Water Section
Attribute_Domain_Values:
Range_Domain:
Range_Domain_Minimum: 00
Range_Domain_Maximum: 75
Attribute_Units_of_Measure: positive integers
Attribute_Measurement_Resolution:
Attribute_Value_Accuracy_Information:
Attribute_Value_Accuracy:
Attribute_Value_Accuracy_Explanation:

DISTRIBUTION_INFORMATION

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Contact_Organization: Indiana Department of Natural Resources, Division of Water

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Hours_of_Service: 8:15am - 4:15pm

Resource_Description:

Distribution_Liability: The Indiana State Department of Natural Resources Division of Water has compiled this data set using data believed to be reasonably accurate; however, the Division makes no representation as to the accuracy, completeness, or usefulness of the data or data set. Reference to any specific commercial product, process, or service does not constitute an endorsement, recommendation, or favoring by the Division.

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Division of Water

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METADATA_REFERENCE_INFORMATION

Metadata_Date: 200210

Metadata_Review_Date:

Metadata_Contact:

Contact_Information:

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Contact_Organization: Indiana Department of Natural Resources, Division of Water

Contact_Person: Glenn Grove

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Contact_Electronic_Mail_Address: ggrove@dnr.state.in.us

Hours_of_Service: 8:15am - 4:15pm

Metadata_Standard_Name: FGDC CSDGM

Metadata_Standard_Version: FGDC-STD-001-1998

Metadata Use Constraints: This metadata file is intended to accompany the subject geospatial data set. This file may be updated, and the most recent version is available by contacting the IDNR Division of Water.